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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/033,827	12/19/2001	Hiroshi Tojo	03500.000002.	8451

5514 7590 09/01/2009

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EXAMINER	
PESIN, BORIS M	

ART UNIT	PAPER NUMBER
2174	

MAIL DATE	DELIVERY MODE
09/01/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/033,827	TOJO ET AL.	
	Examiner	Art Unit	
	BORIS PESIN	2174	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *5/18/2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-31* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

This communication is responsive to the amendment filed 5/18/2009.

Claims 1-31 are pending in this application. Claims 1, 11, 16, 25, 30 and 31 are independent claims. In the amendment filed 5/18/2009, claims 1, 3, 11, 12, 16, 25, 26 and 30-31 were amended. This action is made Non-Final.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/18/2009 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-3, 5-12, 14-17, 19-26, and 28-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yaegashi et al. (US 5956453) in view of Nagasaka et al. (US 5818439).

In regards to claim 1, Yaegashi teaches an image processing apparatus comprising: a storage device that stores scene information including, at least, data for at least one representative frame extracted from, data for an interval of the scene and data for a significance level of the scene of each of a plurality of scenes included in a moving picture to be played back (Figure 6B, Element 201, the significance level is the different hierarchy levels); a selection device that receives a selection of one of the concurrently displayed images of the representative frames on the basis of an external designation (Column 4, Lines 12-31); and a playback control device that plays back the scenes corresponding to the images of the representative frames selected by the selection device (Column 4, Lines 12-31).

Yaegashi does not specifically teach that each of the plurality of scenes is mutually disjoint and is managed with no relationship with the other scenes so as to have the single significance level, a single unique identification and the single unique representative frame; a display device that displays an externally designated significance level by a user operation and extracts, on the basis of the externally designated significance level by the user operation, images of the representative frames

of the plurality of scenes, with each extracted image being extracted from a scene of the plurality of scenes having a significance level equal to or higher than the externally designated significance level by the user operation from the storage device, in order to concurrently display the extracted images chronologically; and a playback control device controlling playback so as to play back the scenes corresponding to the selected images of the representative frames when the selection device receives the selection, and change a current scene to be currently played back, to a temporally preceding or subsequent scene having the significance level the same as the externally designated significance level by the user operation displayed by the display device and being most temporally close to the current scene if the significance level of the current scene is different from the externally designated significance level by the user operation displayed by the display device.

Nagasaka teaches an apparatus wherein each of the plurality of scenes is mutually disjoint and is managed with no relationship with the other scenes so as to have the single significance level, a single unique identification and the single unique representative frame (See Figure 12); a display device that displays an externally designated significance level by a user operation and extracts, on the basis of the externally designated significance level by the user operation, images of the representative frames of the plurality of scenes, with each extracted image being extracted from a scene of the plurality of scenes having a significance level equal to or higher than the externally designated significance level by the operation from the storage device, in order to concurrently display the extracted images chronologically

(See Figure 13, and Column 12, Lines 11-27); and a playback control device controlling playback so as to play back the scenes corresponding to the selected images of the representative frames when the selection device receives the selection, and change a current scene to be currently played back, to a temporally preceding or subsequent scene having the significance level the same as the externally designated significance level by the user operation displayed by the display device and being most temporally close to the current scene if the significance level by the user operation of the current scene is different from the externally designated significance level displayed by the display device. (See Column 12, Lines 28-55).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Yaegashi with the teachings of Nagasaka and include the ability to extract representative frames based on a significance level with the motivation to provide the user with an easier method of distinguishing between important and unimportant video scenes.

In regards to claim 2, Yaegashi-Nagasaka further teach an image processing apparatus according to claim 1, wherein the display device chronologically displays a specified number of the images of the representative frames of the plurality of scenes concurrently (Yaegashi Figure 6B, Element 201).

In regards to claim 3, Yaegashi-Nagasaka further teach an image processing apparatus according to claim 1, wherein the display device refers to the scene information in the storage device when a significance level is externally designated by a user operation (See Nagasaka Figure 13, and Column 12, Lines 11-27), and

chronologically displays images of the representative frames of the scenes having significance levels equal to or higher than the externally designated significances level by the user operation (See Nagasaka Figure 13, and Column 12, Lines 11-27).

In regards to claim 5, Yaegashi-Nagasaka teaches an image processing apparatus according to claim 1, wherein the display device displays the images of the representative frames with data indicative of the significance level corresponding to the representative frames being added to the images of the representative frames (Yaegashi Figure 6B, the hierarchy level, also see Column 3, Lines 52-67).

In regards to claim 6, Yaegashi-Nagasaka teaches an image processing apparatus according to claim 1, wherein the display device displays the scene played back by the playback device together with the images of the representative frames of the scenes, and displays data for discriminating representative frames corresponding to the scene being currently played back from the other representative frames (Yaegashi Figure 1, Element 202 and See Nagasaka Figure 13, and Column 12, Lines 11-27).

In regards to claim 7, Yaegashi-Nagasaka teaches an image processing apparatus according to claim 1, wherein the display device changes a display condition in the images of the representative frames of the scenes that are chronologically displayed based on an external instruction (Nagasaka Figure 17).

In regards to claim 8, Yaegashi-Nagasaka teaches an image processing apparatus according to claim 6, wherein the display device changes a display condition in the images of the representative frames of the scenes that are chronologically

displayed, synchronizing with the images being played back by the playback device (Yaegashi Abstract, and Figure 1 Element 201).

In regards to claim 9, Yaegashi-Nagasaka teaches an image processing apparatus according to claim 6, wherein the display device changes a display condition and selects whether change of the display condition is synchronized with the images being played back by the playback device, based on an external instruction (Yaegashi Abstract).

In regards to claim 10, Yaegashi-Nagasaka teaches an image processing apparatus according to claim 1, wherein the playback device plays back one of the scenes corresponding to one of the images of the representative frames of the scenes, which is externally designated among the images of the representative frames of the scenes displayed by the display device (Yaegashi Abstract and Figure 6B).

Claim 11 is in the same context as claim 1; therefore it is rejected under similar rationale.

Claim 12 is in the same context as claim 3; therefore it is rejected under similar rationale.

Claim 14 is in the same context as claim 5; therefore it is rejected under similar rationale.

Claim 15 is in the same context as claim 7; therefore it is rejected under similar rationale.

Claim 16 is in the same context as claim 1; therefore it is rejected under similar rationale.

In regards to claim 17, Yaegashi-Nagasaka further teach an image processing apparatus according to claim 16, wherein the display step chronologically displays a specified number of the images of the representative frames of the plurality of scenes concurrently (Yaegashi Abstract and Figure 6B, Element 201).

Claim 19 is in the same context as claim 5; therefore it is rejected under similar rationale.

Claim 20 is in the same context as claim 6; therefore it is rejected under similar rationale.

Claim 21 is in the same context as claim 7; therefore it is rejected under similar rationale.

Claim 22 is in the same context as claim 8; therefore it is rejected under similar rationale.

Claim 23 is in the same context as claim 9; therefore it is rejected under similar rationale.

Claim 24 is in the same context as claim 10; therefore it is rejected under similar rationale.

Claim 25 is in the same context as claim 11; therefore it is rejected under similar rationale.

Claim 26 is in the same context as claim 12; therefore it is rejected under similar rationale.

Claim 28 is in the same context as claim 14; therefore it is rejected under similar rationale.

Claim 29 is in the same context as claim 15; therefore it is rejected under similar rationale.

Claim 30 is in the same context as claim 1; therefore it is rejected under similar rationale.

Claim 31 is in the same context as claim 11; therefore it is rejected under similar rationale.

Claims 4, 13, 18, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yaegashi-Nagasaka in view of Acharya et al. (US 6348929).

In regards to claim 4, Yaegashi-Nagasaka teach all the limitations of claim 1. Yaegashi does not teach an image processing apparatus wherein the images of the representative frames included reduced images. Acharya teaches, "Essentially, captured images are compressed by an image compression circuit 732 so that they can be efficiently stored in an image memory unit 734, which may be a ROM, RAM or other storage device such as a fixed disk." Column 13, Line 36). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Yaegashi-Nagasaka with the teachings of Acharya and include a method to compress the images with the motivation to provide the user with more space on the memory.

Claim 13 is in the same context as claim 4; therefore it is rejected under similar rationale.

Claim 18 is in the same context as claim 4; therefore it is rejected under similar rationale.

Claim 27 is in the same context as claim 4; therefore it is rejected under similar rationale.

Response to Arguments

Applicant's arguments filed 5/18/2009 have been fully considered but they are not persuasive.

In regards to the Applicant's arguments that Nagasaka does not teach that a user can select the significance level of video image, the Examiner respectfully disagrees. Nagasake teaches, "Reference numeral 1303 indicates an area in which representative image ranks are entered. In this example, the significance of the representative image 1302 is entered from the input device such as a keyboard 204, a mouse 202 or the controller 112 while looking at the display 401. The entered significance rank information is associated with the corresponding representative images to be stored in the representative image library 104 of FIG. 12 in a file format." (Column 11, Lines 18-35 and Figure 17). Therefore, Nagasaka does teach that the user can enter the significance level.

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BORIS PESIN whose telephone number is (571)272-

4070. The examiner can normally be reached on Monday-Friday except every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dennis Chow can be reached on (571)272-7767. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Boris Pesin/
Primary Examiner, Art Unit 2174